

IR - PERPUSTAKAAN UNIVERSITAS AIRLANGGA

THE EFFECT OF KEBAR GRASS (*Biophytum petersianum* K.) ETHANOL EXTRACT TOWARDS THE AMOUNT OF SPERMATOGENIC CELLS OF MICE (*Mus musculus*) INDUCED BY 2,3,7,8 TETRACHLORINE DIBENZO-P-DIOXIN

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ABSTRACT

The purpose of this study was to determine the effect of ethanol extract of Kebar Grass on the number of spermatogenic cells of male mice induced 2,3,7,8-Tetrachlorodibenzo-P-Dioxin. 30 male mice were divided into five treatments. Group K(-) was given aquadest 0.1 ml during the experiment, group K(+) was given TCDD 0.14 µg each mice for once. P1 treatment group was given TCDD 0.14 µg each mice for once and given Kebar grass extract 0,045mg/g BW/day for 53 days. P2 treatment group was given TCDD 0.14 µg each mice for once and given Kebar grass extract 0,080 mg/g BW/day for 53 days, and treatment group P3 was given TCDD 0,14µg each mice for once and given Kebar Grass extract 0,135mg/g BW/day for 53 days. Then all of the mice testes were taken to be made as histopathology preparation. After that, it was checked by microscope to calculate the average number of spermatogenic cells. The results of this study indicate that there were significant differences between group with induces TCDD and no induces. But there's no significant differences treatment of group with extract Kebar Grass doses 0,080 mg/g with average spermatogenic cells $144 \pm 5,33$ and group with doses 0,135 mg/g of Kebar Grass with average spermatogenic cells $192,6 \pm 5,17$ between group of aquadest with average spermatogenic cells $208 \pm 26,08$. The conclusion of this research is Kebar grass extract has been able to sustain the fertility in male mice that were induced by TCDD.

Keywords: Kebar Grass, TCDD, amount of spermatogenic cells